#### TRAITÉ DE COOPÉRATION EN MATIÈRE DE BREVETS

## **PCT**

# RAPPORT PRÉLIMINAIRE INTERNATIONAL SUR LA BREVETABILITÉ (chapitre I du Traité de coopération en matière de brevets)

(règle 44bis du PCT)

Référence du dossier du déposant ou du mandataire BB03 ANT B28	POUR SUITE À DONNER	Voir le point 4 ci-dessous
Demande internationale no. PCT/FR2004/002935	Date du dépôt international (jour/mois/année) 18 November 2004 (18.11.2004)	Date de priorité (jour/mois/année) 18 November 2003 (18.11.2003)
Classification internationale des brevets (8 <sup>e</sup> edition, sauf indication d'une #dition ant#rieure) Voir les informations pertinentes dans le formulaire PCT/ISA/237		
Déposant ANTONOV AUTOMOTIVE TECHNOLOGIES B.V.		

1.	Le présent rapport préliminaire l'administration chargée de la	international sur la brecherche internationa	revetabilité (chapitre I) est établi par le Bureau international au nom de le selon la règle 44 <i>bis</i> .1.a).
2.	Dans les feuilles jointes, toute	référence à l'opinion o	npris la présente feuille de couverture. écrite de l'administration chargée de la recherche internationale doit être t préliminaire international sur la brevetabilité (chapitre I).
3.	Le présent rapport contient des	indications relatives	aux points suivants :
	Cadre n° I	Base de l'opinior	1
	Cadre n° Π	Priorité	
	Cadre n° III	Absence de form d'application ind	ulation d'opinion quant à la nouveauté, l'activité inventive et la possibilité ustrielle
	Cadre n° IV	Absence d'unité	de l'invention
	Cadre n° V		vée selon l'article 35.2) quant à la nouveauté, l'activité inventive et la ication industrielle; citations et explications à l'appui de cette déclaration
	Cadre n° VI	Certains docume	nts cités
	Cadre n° VII	Certaines irrégula	arités relevées dans la demande internationale
	Cadre n° VIII	Certaines observa	ations relatives à la demande internationale
4.	Le Bureau international comm mais pas avant l'expiration du requête expresse à cet égard en	délai de 30 mois à cor	oport aux offices désignés conformément aux règles 44bis.3.c) et 93bis.1 apter de la date de priorité (règle 44bis.2), sauf si le déposant a présenté une 2).
			Date d'établissement du présent rapport 29-August 2006 (29:08:2006)
	Bureau internationa		Fonctionnaire autorisé
34, chemin des Colombettes 1211 Geneva 20, Switzerland			Beate Giffo-Schmitt

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no de télécopieur +41 22 338 82 70 Formulaire PCT/IB/373 (janvier 2004)

#### PATENT COOPERATION TREATY

TRANSLATION From the INTERNATIONAL SEARCHING AUTHORITY To: WRITTEN OPINION OF THE INTERNATIONAL SEARCHING AUTHORITY (PCT Rule 43bis.1) Date of mailing See form PCT/ISA/210 (day/month/year) Applicant's or agent's file reference FOR FURTHER ACTION BB03 ANT B28 See paragraph 2 below International application No. International filing date (day/month/year) Priority date (day/month/year) PCT/FR2004/002935 18.11.2004 18.11.2003 International Patent Classification (IPC) or both national classification and IPC F16H3/00 Applicant ANTONOV AUTOMOTIVE TECHNOLOGIES B.V. This opinion contains indications relating to the following items: Box No. I Basis of the opinion Box No. II Priority Box No. III Non-establishment of opinion with regard to novelty, inventive step and industrial applicability Box No. IV Lack of unity of invention Reasoned statement under Rule 43bis.1(a)(i) with regard to novelty, inventive step or industrial Box No. V applicability; citations and explanations supporting such statement Box No. VI Certain documents cited Box No. VII Certain defects in the international application Box No. VIII Certain observations on the international application FURTHER ACTION 2. If a demand for international preliminary examination is made, this opinion will be considered to be a written opinion of the International Preliminary Examining Authority ("IPEA") except that this does not apply where the applicant chooses an Authority other than this one to be the IPEA and the chosen IPEA has notified the International Bureau under Rule 66.1bis(b) that written opinions of this International Searching Authority will not be so considered. If this opinion is, as provided above, considered to be a written opinion of the IPEA, the applicant is invited to submit to the IPEA a written reply together, where appropriate, with amendments, before the expiration of 3 months from the date of mailing of Form PCT/ISA/220 or before the expiration of 22 months from the priority date, whichever expires later. For further options, see Form PCT/ISA/220. For further details, see notes to Form PCT/ISA/220. Name and mailing address of the ISA/EP Authorized officer

Telephone No.

Facsimile No.

International application No.
PCT/FR2004/002935

Box	No. I	Basis of this opinion
1.		egard to the language, this opinion has been established on the basis of the international application in the language in which it was unless otherwise indicated under this item.
		This opinion has been established on the basis of a translation from the original language into the following language
	_	, which is the language of a translation furnished for the purposes of international search (under
		Rule 12.3 and 23.1(b)).
2.		regard to any nucleotide and/or amino acid sequence disclosed in the international application and necessary to the claimed ion, this opinion has been established on the basis of:
	a. t	ype of material
		a sequence listing
		table(s) related to the sequence listing
	b. i	format of material
		in written format
		in computer readable form
	c. t	time of filing/furnishing
		contained in the international application as filed.
	Ī	filed together with the international application in computer readable form.
	Ī	furnished subsequently to this Authority for the purposes of search.
3.		In addition, in the case that more than one version or copy of a sequence listing and/or table(s) relating thereto has been filed or furnished, the required statements that the information in the subsequent or additional copies is identical to that in the application as filed or does not go beyond the application as filed, as appropriate, were furnished.
4.	Additi	onal comments:
"		
1		
. .	1	

International application No.
PCT/FR2004/002935

Box		asoned statement under Rule 43bis.1(a)(i) with regard to novelty, inventive step or industrial applicability; ations and explanations supporting such statement	
1.	Statement		
	Novelty (N)	Claims 2,10-13	YES
		1 2 0 14	NO
	Inventive step	(IS) Claims 2,10,11	YES
		Claims 1,3-9,12-14	NO
	Industrial app	olicability (IA) Claims 1-14	YES
			NO
_	Citation and an		
2.	2. Citations and explanations:		
		eference is made to the following documents: 1: US 2003/199360 A1 (BIALLAS JEFFREY J)	
	υ.	23 October 2003 (2003-10-23)	
	D.		
	υ.	2: US 4 468 980 A (JOHANSEN ROY W) 4 September	
	D.	1984 (1984-09-04)	
	υ.	3: US 2 981 126 A (KELLEY OLIVER K) 25 April	
	70	1961 (1961-04-25)	
	ים	4: US-A-5 735 376 (KASUYA SATORU ET AL) 7 April	
	D	1998 (1998-04-07)	
	ט:	5: US-A-5 584 775 (YOKOYAMA FUMITOMO ET AL) 17	
		December 1996 (1996-12-17)	
	2 11	NDEPENDENT CLAIM 1	
	2 11	NDEFENDENT CLAIM I	
	2,1 T	he present application fails to comply with the	
		equirements of PCT Article 33(1) since the	
		ubject matter of claim 1 does not meet the	
		equirement of novelty defined in PCT Article	
		3(2).	
		ocument D1 describes (the references between	
		arentheses apply to this document, see-figures-1	
		nd 2):	
	u.	a multi-speed transmission device for	
1		a mater opeca cranomization device re-	

International application No.
PCT/FR2004/002935

Box No. V

Reasoned statement under Rule 43bis.1(a)(i) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

connecting an engine to a load such as a motor vehicle, comprising

- an upstream shaft (20),
- a downstream shaft (40),
- interconnected by at least two power trains (14, 16, 18) of which at least one defines at least two transmission ratios, the ratios being different from one train to the other between the upstream shaft and the downstream shaft,
- on each power train, means for selective activation (comprising respectively a clutch 24, 44, 64 and a synchronizer 34, 48, 68) for bringing about each given ratio (synchronizer-type coupling elements 34, 48, 68) and for deactivating in terms of power transmission (clutch 24, 44, 64) the at least one train other than that defining said given ratio,
- the connection between the upstream shaft (20) and a respective input means (22, 42, 62) of each of the power trains being permanent, and
- the selective activation means being of a progressive type (clutch 24, 44, 64) and capable of adapting the speed of the engine and the speed of the load.
- DEPENDENT CLAIMS 3-9, 12-14

  The claims do not contain any features which, in combination with the features of any claim to which they refer, meet the requirements of the PCT

Box No. V

Reasoned statement under Rule 43bls.1(a)(i) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

in respect of novelty and inventive step (PCT Article 33(2) and (3)).

The features of claims 3 to 9 and 14 are known from D1:

Claim 3: each planetary gear train is associated with 1 brake 12.

Claim 4: each train is independent and comprises an output element (36, 58, 76) connected to the output shaft (40).

Claim 5: the two trains 14 and 18 are essentially identical locally but allow different ratios to be achieved ( $2^{nd}$  and  $5^{th}$  for 14;  $6^{th}$  and  $3^{rd}$  for 18) Claim 6: each power train comprises a local direct drive ratio (see paragraph 30).

Claim 7: the neutral state of each train is brought about by opening the corresponding clutch or by a neutral position of each synchronization system (see paragraph 30).

Claims 8 and 9: the trains each comprise a planetary gear train (26, 46, 66) mounted in parallel.

Claim 14: see D1, claim 10.

The features of claims 11 and 12 are known in the field of automatic gearboxes (see respectively D4, figure 1, and D5, figure 2) and therefore do not appear to be inventive in nature.

4 DEPENDENT CLAIMS 2, 10 and 11
The combination of characteristics of claims 2, 10
and 11 is not contained in the prior art and does

International application No.
PCT/FR2004/002935

Box No. V Reasoned statement under Rule 43bis.1(a)(i) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

not follow from it in an obvious way for the following reasons:

claim 2 specifies that the selective activation means are oil-cooled multi-disc friction clutch means. In the device of D1, the selective activation means are a combination of synchronization system and friction clutch means. In particular, the friction clutch means of D1 (clutch 24, 44, 64) do not make it possible to bring about each given ratio on a power train. The exclusive use of friction clutch means for producing different ratios of a planetary gear train box is known in particular from D2 or D3, but the devices of these documents differ from that of the invention in that the different power trains are always engaged, one aim of these devices being to distribute the torque on two parallel trains.

The features of claims 10 and 11 relate in detail to the structure of the power trains. Such details are neither known from nor suggested by the available prior art.

#### PATENT COOPERATION TREATY

## **PCT**

# INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY (Chapter I of the Patent Cooperation Treaty)

(PCT Rule 44bis)

Applicant's or agent's file reference A/PFE 318	FOR FURTHER ACTION	See item 4 below
International application No. PCT/EP2004/013357	International filing date (day/month/year) 25 November 2004 (25.11.2004)	Priority date (day/month/year) 05 December 2003 (05.12.2003)
International Patent Classification (8th edition unless older edition indicated) See relevant information in Form PCT/ISA/237		
Applicant CIBA SPEZIALITĀTENCHEMIE PFERSEE GMBH		

1.	This international preliminary report on patentability (Chapter I) is issued by the International Bureau on behalf of the International Searching Authority under Rule 44 bis. 1(a).		
2.	This REPORT consists of a total of 6 sheets, including this cover sheet.		
	In the attached sheets, any reference to the written opinion of the International Searching Authority should be read as a reference to the international preliminary report on patentability (Chapter I) instead.		
3.	This report contains indications relating to the following items:		
	Box No. I	Basis of the report	
	Box No. II	Priority	
	Box No. III	Non-establishment of opinion with regard to novelty, inventive step and industrial applicability	
	Box No. IV	Lack of unity of invention	
	Box No. V	Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement	
	Box No. VI	Certain documents cited	
	Box No. VII	Certain defects in the international application	
	Box No. VIII	Certain observations on the international application	
4.		ommunicate this report to designated Offices in accordance with Rules 44bis.3(c) and 93bis.1 but makes an express request under Article 23(2), before the expiration of 30 months from the priority	

Date of issuance of this report 07-June 2006 (07.06.2006)

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